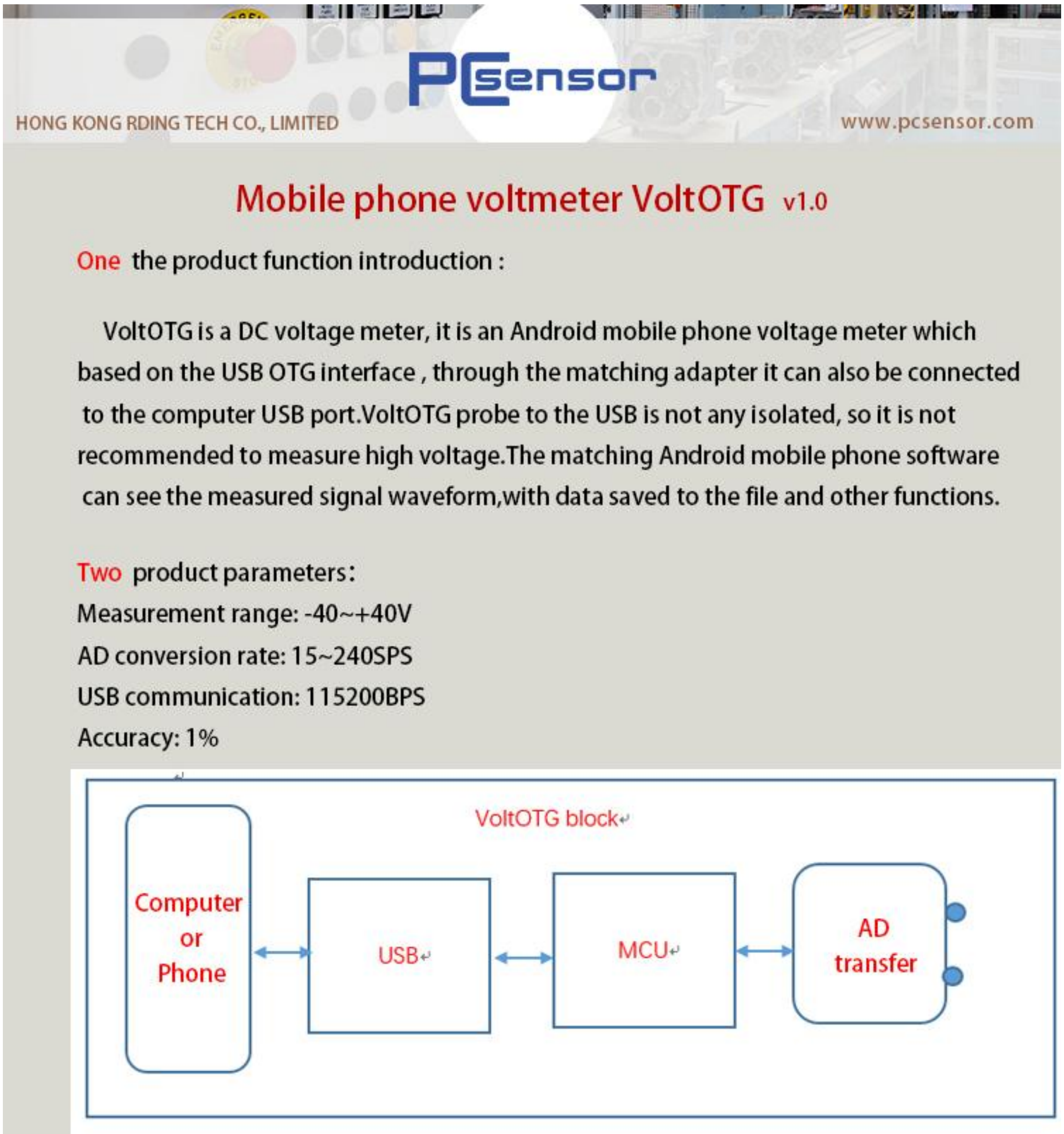
VoltOTG is a DC voltage meter, it is an Android mobile phone voltage meter which based on the USB OTG interface , through the matching adapter it can also be connected to the computer USB port.VoltOTG probe to the USB is not any isolated, so it is not recommended to measure high voltage.
The matching Android mobile phone software can see the measured signal waveform,with data saved to the file and other functions.

Note: Android mobile phone must support the OTG function then it can be used


HONG KONG RDING TECH CO., LIMITED

PCsensor

www.pcsensor.com

Mobile phone voltmeter VoltOTG v1.0

One the product function introduction :

VoltOTG is a DC voltage meter, it is an Android mobile phone voltage meter which based on the USB OTG interface , through the matching adapter it can also be connected to the computer USB port.VoltOTG probe to the USB is not any isolated, so it is not recommended to measure high voltage.The matching Android mobile phone software can see the measured signal waveform,with data saved to the file and other functions.

Two product parameters:

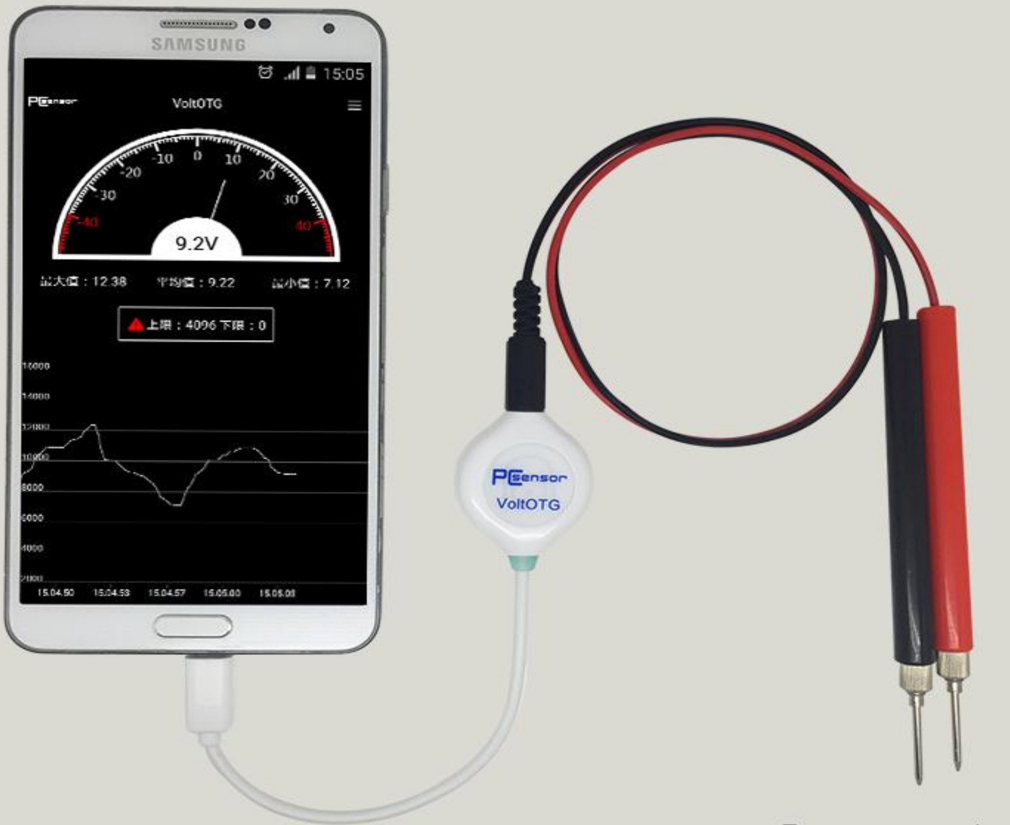
Measurement range: -40~+40V

AD conversion rate: 15~240SPS

USB communication: 115200BPS

Accuracy: 1%

Three Picture of products



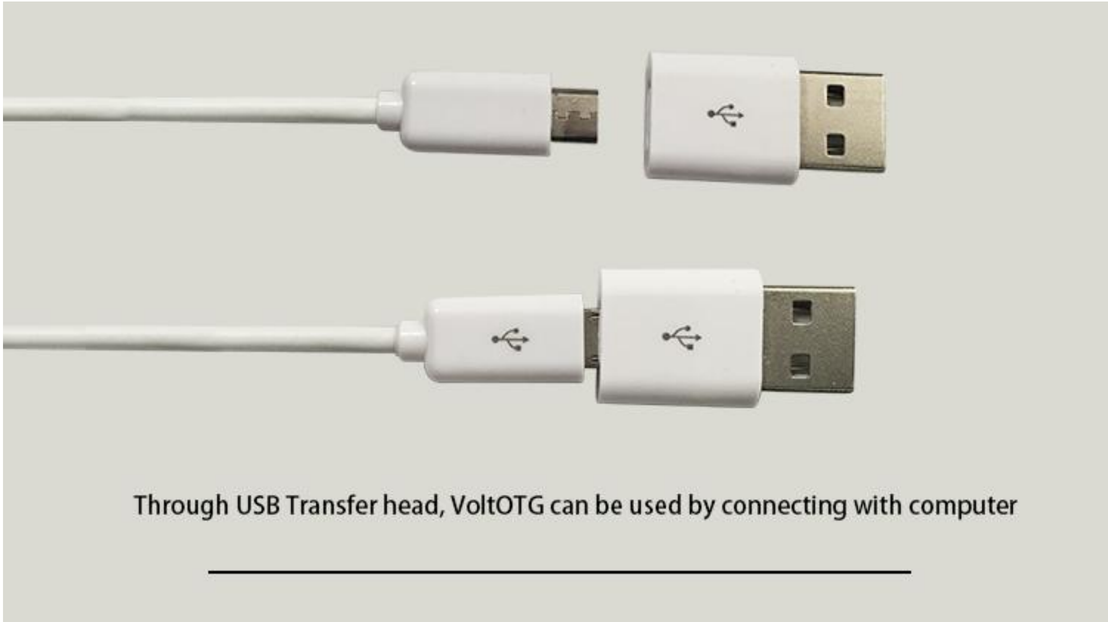
Test pen connection



Fitting: Test hook probe

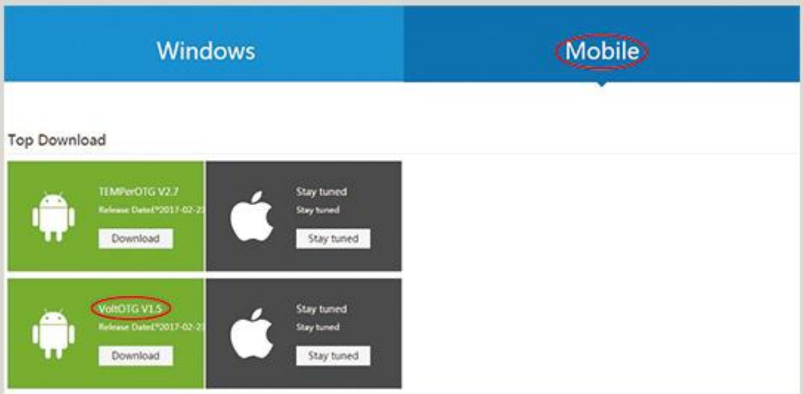


Fitting: Alligator clip probe


Through USB Transfer head, VoltOTG can be used by connecting with computer

Four： Software operation instructions

1、Login the website: http://software.pcsensor.com/mobile_en.html
download the software and and install it successfully (download the software without inserting the device)

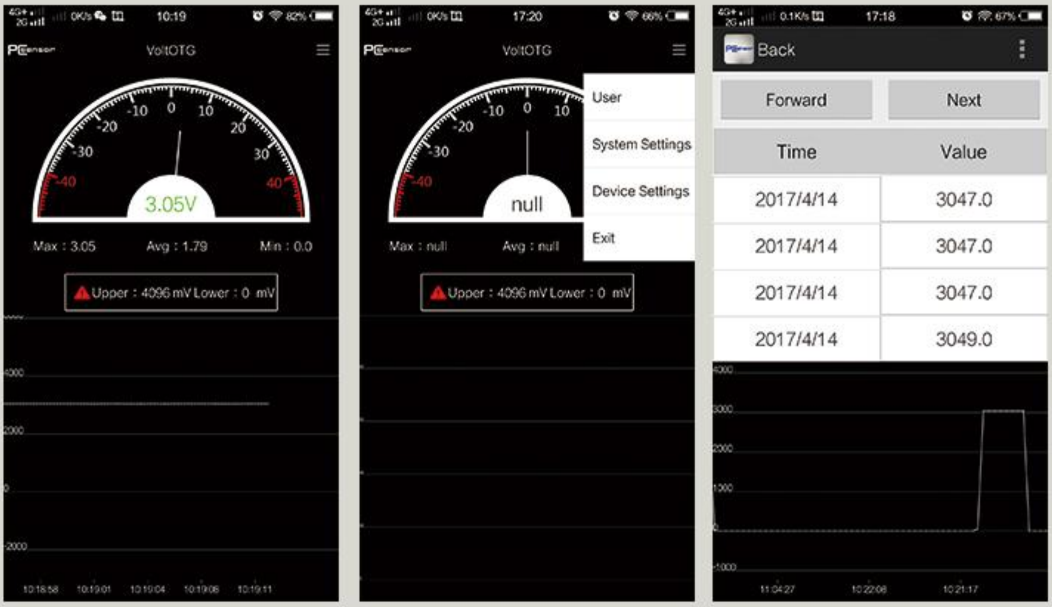


2、After the software installed successfully, plug-in device,you can see the software automatically open

3、Open the OTG function on the phone, the device on the LED lights begin flashing

4、Connect the probe into the measured object,there will be data display in the software

Note:Confirm the Android phone has a OTG function



Five communication agreement:

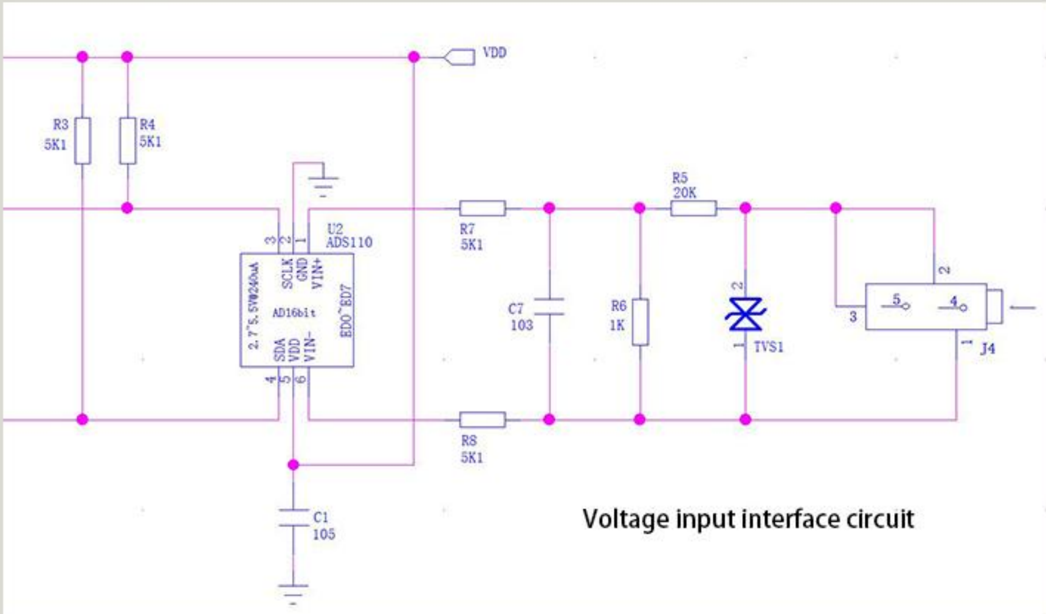
1 Secondary development communication agreement:

VoltOTG support for the secondary development, a brief description of secondary development as the following :

COM configuration:

- Baud rate: 115200bps
- Data bits: 8
- Parity: None
- Stop bit: 1

Send help or? Can obtain all communication commands.



Voltage input interface circuit

Instruction of AD transform IC



ADS1110

SBAS276 – MARCH 2003

16-Bit ANALOG-TO-DIGITAL CONVERTER with Onboard Reference

FEATURES

- COMPLETE DATA ACQUISITION SYSTEM IN A TINY SOT23-6 PACKAGE
- ONBOARD REFERENCE:
  Accuracy: 2.048V ±0.05%
  Drift: 5ppm/°C
- ONBOARD PGA
- ONBOARD OSCILLATOR
- 16-BITS NO MISSING CODES
- INL: 0.01% of FSR max
- CONTINUOUS SELF-CALIBRATION
- SINGLE-CYCLE CONVERSION
- PROGRAMMABLE DATA RATE: 15SPS TO 240SPS
- I²C™INTERFACE—EIGHT AVAILABLE ADDRESSES
- POWER SUPPLY: 2.7V to 5.5V
- LOW CURRENT CONSUMPTION: 240μA

APPLICATIONS

- PORTABLE INSTRUMENTATION
- INDUSTRIAL PROCESS CONTROL
- SMART TRANSMITTERS
- CONSUMER GOODS
- FACTORY AUTOMATION
- TEMPERATURE MEASUREMENT

DESCRIPTION

The ADS1110 is a precision, continuously self–calibrating Analog-to-Digital (A/D) converter with differential inputs and up to 16 bits of resolution in a small SOT23-6 package. The onboard 2.048V reference provides an input range of ±2.048V differentially. The ADS1110 uses an I²C-compatible serial interface and operates from a single power supply ranging from 2.7V to 5.5V.

The ADS1110 can perform conversions at rates of 15, 30, 60, or 240 samples per second. The onboard programmable gain amplifier (PGA), which offers gains of up to 8, allows smaller signals to be measured with high resolution. In single-conversion mode, the ADS1110 automatically powers down after a conversion, greatly reducing current consumption during idle periods.

The ADS1110 is designed for applications requiring high-resolution measurement, where space and power consumption are major considerations. Typical applications include portable instrumentation, industrial process control, and smart transmitters.

